INOVA® ALEXANDRIA HOSPITAL

Christine M. Candio, RN, FACHE
Senior Vice President, Inova Health System
Chief Executive Officer, Inova Alexandria Hospital

4320 Seminary Road
Alexandria, Virginia 22304

Tel 703-504-3167
Fax 703-504-3700
christine.candio@inova.org

Br1

U.S. Nuclear Regulatory commission Region I
Medical Licensing Section
475 Allendale Road
Kings Prussia, PA 19406

03003335

RECEIVED
REGION 1
2009 JAN 20 PM 1:27

RE: Addition of Authorized User (AU) to NRC License no. 45-09358-02

Dear Sirs:

Please accept this letter and attachments as a request to add Ramesh Rao, M.D as an Authorized User (AU) for materials in 35.100, 35.200, and 35.300.

Dr. Rao was previously approved to use these materials under a broad-scope license at the John D. Dingell of VA Medical Center in Detroit, Michigan.

Thank you for your attention to this matter. If you have any questions, please contact me or Min Lee, Clinical Coordinator, Radiology at 703-504-3107.

Sincerely,

Christine M. Candio, RN, FACHE
Chief Executive Officer

Enclosures:

- Materials Permit from John D. Dingell of VA Medical Center
- Approval Memorandum from VA John D. Dingell of VA Medical Center
- CV of Dr. Ramesh Rao.

143211

NMSS/RGN1 MATERIALS-002

Department of Veterans Affairs

Memorandum

Date: March 15, 1999

From: Radiation Safety Officer

Subj: Approval for Diagnostic Use of Radiopharmaceuticals

To: Ramesh Rao, M.D.

1. The Radiation Safety Committee has approved (March 15, 1999) you for the diagnostic and therapeutic use of radiopharmaceuticals as described in 10 CFR 35.100, 35.200, and 35.300. You are required to follow the policy and procedures that are contained in our facility's "Nuclear Medicine Quality Management Program" (attached).

2. Please contact me at extension 3595 if you need further assistance.

Steve Conatser

Steve Conatser

cc: Credentialing File
Chairman, Radiation Safety Committee

DEPARTMENT OF VETERANS AFFAIRS

Memorandum

Date: APR 10 2008

From: Director, VHA National Health Physics Program (115HP/NLR)

Subj: VHA Permit Number 21-04234-01 (for radioactive materials use)

To: Director (553/00), John D. Dingell VA Medical Center, Detroit, Michigan

1. We are forwarding the attached VHA Permit Number 21-04234-01, Amendment No. 97. The amendment is issued based on an amendment to the VHA master materials license authorizing 10-year permit renewals. Your permit expiration date is extended to March 31, 2016.

2. Based on a telephone discussion with your Radiation Safety Officer on March 31, 2008, we did not identify any required changes to your permit to implement the recently promulgated Nuclear Regulatory Commission rules, effective November 30, 2007, for the use of NARM (naturally-occurring or accelerator-produced radioactive materials).

3. Please review the permit amendment carefully to ensure you understand the permit approvals and conditions. This permit is issued as a program code 2110/3610 permittee for broad-scope medical and research radioactive material uses.

4. If you have any questions, please contact Thomas E. Huston, Ph.D., VHA National Health Physics Program, at (501) 257-1578.

E. Lynn McGuire

Attachment

Department of Veterans Affairs

Page 1 of 4 pages	**MATERIALS PERMIT**	Amendment No. 97

In accordance with VHA Directive 1105.1 and reliance on statements made by the applicant, permission is hereby granted to receive, possess, transfer, and store radioactive materials listed below, and to use this material for the purpose and at the places listed below.

Permittee	
1. John D. Dingell VA Medical Center 2. 4646 John R. Street Detroit, Michigan 48201	3. In accordance with **NRSC meeting of August 8, 2007,** Permit Number 21-04234-01 is amended to read as follows: 4. Expiration date: **March 31, 2016** 5. Docket or Reference Number: 030-02050

6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount permittee may possess at any one time under this permit
A. Any byproduct material with Atomic Numbers 1-83	A. Any	A. 200 millicuries per radionuclide and 15 curies total
B. Hydrogen 3	B. Any	B. 250 millicuries
C. Sulfur 35	C. Any	C. 600 millicuries
D. Technetium 99m	D. Any	D. 10 curies
E. Molybdenum 99	E. Any	E. 10 curies
F. Iodine 131	F. Any	F. 1 curie
G. Xenon 133	G. Any	G. 300 millicuries
H. Samarium 153	H. Any	H. 200 millicuries
I. Any byproduct material with Atomic Numbers 3-83	I. Sealed sources	I. [illegible] curies per radionuclide and 15 curies total

9. Authorized Use:

A. through I. Medical diagnosis, therapy, and research in humans. Research and development as defined in 10 CFR 30.4, including animal studies, instrument calibration, student instruction, and *in vitro* studies.

CONDITIONS

10. Permitted material may be used only at the permittee's facilities located at 4646 John R. Street, Detroit, Michigan.

11. A. The Radiation Safety Officer for this permit is Steven D. Conatser.

B. The use of permitted material in or on humans shall be by an authorized user as defined in 10 CFR 35.2.

C. Individuals designated to work as authorized users, authorized nuclear pharmacists, or authorized medical physicists as defined in 10 CFR 35 shall meet the training, experience, and recentness of training

criteria established in 10 CFR 35, and shall be designated, in writing, by the permittee's Radiation Safety Committee.

D. Permitted material for other than human use shall be used by, or under the supervision of, individuals designated by the Radiation Safety Committee.

12. Permitted material shall not be used in field applications where activity is released except as provided otherwise by specific condition of this permit.

13. Experimental animals, or the products from experimental animals, that have been administered permitted material shall not be used for human consumption.

14. This permit does not authorize commercial distribution of permitted material.

15. For sealed sources not associated with 10 CFR 35 use, the following conditions apply:

A. Sealed sources shall be tested for leakage and/or contamination at intervals not to exceed the intervals specified in the certificate of registration issued by the Nuclear Regulatory Commission under 10 CFR 32.210 or under equivalent regulations of an Agreement State.

B. Notwithstanding Paragraph A of this permit condition, sealed sources designed to primarily emit alpha particles shall be tested for leakage and/or contamination at intervals not to exceed three months.

C. Each sealed source fabricated by the permittee shall be inspected and tested for construction defects, leakage, and contamination prior to any use or transfer as a sealed source.

D. In the absence of a certificate from a transferor indicating a leak test has been made within the intervals specified in the certificate of registration issued by the Nuclear Regulatory Commission under 10 CFR 32.210 or under equivalent regulations of an Agreement State, prior to the transfer, a sealed source received from another person shall not be put into use until tested and the test results received.

E. Sealed sources need not be tested if they contain only hydrogen 3, or they contain only a radioactive gas, or the half-life of the isotope is 30 days or less, or they contain not more than 100 microcuries of beta- and/or gamma-emitting material, or not more than 10 microcuries of alpha-emitting material.

F. Sealed sources need not be tested if they are in storage and are not being used; however, when they are removed from storage for use or transfer to another person and have not been tested within the required leak test interval, they shall be tested before use or transfer. No sealed source shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.

G. The leak test shall be capable of detecting the presence of 0.005 microcurie (185 becquerels) of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie (185 becquerels) or more of removable contamination, a report shall be filed with the National Health Physics Program in accordance with 10 CFR 30.50(c)(2), and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Nuclear Regulatory Commission regulations.

H. Tests for leakage and/or contamination, including leak test sample collection and analysis, shall be performed by the permittee or by other persons specifically licensed by the Nuclear Regulatory Commission or an Agreement State to perform such services.

16. Sealed sources containing permitted material shall not be opened or sources removed from source holders by the permittee.

17. A. The permittee shall conduct physical inventories to account for all sealed sources and/or devices received and possessed under this permit.

(1) Quarterly, for sealed sources with either current activity greater than one millicurie or current activity greater than 1000 times the quantities in 10 CFR 20, Appendix C.

(2) Semiannually, for all other sealed sources, except sources specifically exempted by 10 CFR 30.

B. The permittee shall maintain records for five years from the date of each inventory and include the radionuclides, quantities, manufacturer's name and model numbers, and the date of the inventory.

C. The permittee shall classify sealed sources, not in active use for their intended clinical or research purpose for a period of 24 months, as disused sources and evaluate the disused sources for disposal as expeditiously as possible.

D. The permittee shall provide oversight for security of radioactive materials by:

(1) Compliance with regulations per 10 CFR 20.1801 and 10 CFR 20.1802.

(2) Prevention of adversary or unauthorized removal of, or access to, radioactive materials.

(3) Use of two delay methods for sealed sources not in use.

(4) Focus to security commensurate with possible risks of radioactive materials unauthorized use.

18. A. Detector cells containing a titanium tritide foil or a scandium tritide foil shall only be used in conjunction with a properly operating temperature control mechanism which prevents the foil temperature from exceeding that specified by the manufacturer and approved by the Nuclear Regulatory Commission.

B. When in use, detector cells containing a titanium tritide foil or a scandium tritide foil shall be vented to the outside.

19. Maintenance, repair, cleaning, replacement, and disposal of foils contained in detector cells shall be performed only by the device manufacturer or other persons specifically authorized by the Nuclear Regulatory Commission or an Agreement State to perform such services.

20. For radioactive material held for decay in storage other than that held in accordance with 10 CFR 35.92, the permittee is authorized to hold radioactive material with a physical half-life of less than 120 days for decay in storage before disposal in ordinary trash, provided:

A. Before disposal as ordinary trash, the waste shall be surveyed at the container surface with the appropriate survey instrument set on its most sensitive scale and with no interposed shielding to determine its radioactivity cannot be distinguished from background. All radiation labels shall be removed or obliterated.

B. A record of each disposal permitted under this permit condition shall be retained for three years. The record must include the date of disposal, the date on which the byproduct material was placed in storage, the radionuclides disposed, the survey instrument used, the background dose rate, the dose rate measured at the surface of each waste container, and the name of the individual who performed the disposal.

21. The permittee is authorized to transport permitted material only in accordance with the provisions of 10 CFR 71, "Packaging and Transportation of Radioactive Material."

22. In addition to the possession limits in Item 8, the permittee shall further restrict the possession of unsealed byproduct material to quantities less than 10^5 times the applicable limits in Appendix B of 10 CFR 30, as specified in 10 CFR 30.35(d).

23. Incineration of permitted material for the purpose of disposal may be performed only as authorized by 10 CFR 20.2004(a)(2).

24. Pursuant to 10 CFR 20.2002, the permittee may dispose of emptied scintillation vials, which previously contained sulfur 35, as normal waste, subject to the survey and sampling commitments in the letter dated February 17, 1995 (excluding Item (1) under the heading "Disposal of Contaminated Vial Batches").

25. Except as specifically provided otherwise in this permit, the permittee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. This permit condition applies only to those procedures required to be submitted in accordance with the regulations. Additionally, this permit condition does not limit the permittee's ability to make changes to the radiation protection program as provided for in 10 CFR 35.26. The Nuclear Regulatory Commission regulations shall govern unless the statements, representations, and procedures in the permittee's application and correspondence are more restrictive than the regulations.

    A. Application dated February 27, 2006 [NHPP Form 313 with attachments]

FOR THE DEPARTMENT OF VETERANS AFFAIRS

Date APR 10 2008

By _____
E. Lynn McGuire
Director, National Health Physics Program
North Little Rock, Arkansas

Ramesh Rao, MD

Association of Alexandria Radiologists,
2001 N.Beauregard St.
Alexandria, VA 22311

Certifications

Dual board certifications • American Board of Radiology • American Board of Nuclear Medicine • Currently Licensed to practice medicine in Virginia.

Work Experience

Assoc. of Alexandria Radiologists, Alexandria, VA 2003 to Current

Private Practice Radiology covering several hospitals and Radiology Offices in Northern Virginia. • Alexandria Hospital, • Mount Vernon Hospital • Springfield Medical Center, • Fair Oaks Hospital (formerly). Spectrum of Clinical Practice Includes: General Diagnostic Imaging, CT, MR, US, Nuclear Medicine, Mammography. including breast biopsy, Arthrograms. • Nighthawk Tele-radiology for 2 years - Cover Four hospitals practicing emergency-radiology.

John D. Dingell VA Medical Center, Detroit, MI 2000-2003

• Chairman, Radiation Safety Committee of the hospital • Chief of the Nuclear Medicine section, responsible for the Quality control of the Nuclear Medicine Department • Supervisor for the Rotating radiology residents • Advocated establishing a PET Program developed proposal for hospital Administration and clinical staff. • Equipment Acquisitions: Proposal and successful acquisition of MR power injector; Proposal for multislice CT acquisition; Evaluation, proposal and successful Nuc- Med equipment acquisition • Practice all aspects of Clinical Nuclear Medicine including Therapy.

Education & Residency

Diagnostic Radiology Residency : Graduated 1999. • Penn State Geisinger Medical Center, Nuclear Medicine Residency : Graduated 1996 • University of Tennessee Medical Center, Surgery Internship 1994 • New York Medical College-Lincoln Medical Center Medical School • University of Mysore-Medical College, India. 1991. Graduate School , Master of Science • Rutgers University -UMDNJ, New Jersey

Scientific Presentations

• "3D display and correlation of whole body PET with CT of chest, abdomen and Pelvis." K.Hutson, R. Rao, K.F.Hubner, G.T.Smith. *Abstract*. Radiology 1995; 435(P): 234.

• "Value of PET in the evaluation of Head & Neck Tumors." R. Rao and Karl F. Hübner. *Abstract*. Radiology 1995; 435(P): 234

• RSNA -InfoRAD 1995 . Demonstration of PET and CT co-registration software.

Affiliations

o American College of Radiology
o Radiological Society of North America
o American Roentgen Ray Society
o Society of Nuclear Medicine

Telephone 703-824-3210 Facsimile 703-671-4502 Email rao@doctor.com

This is to acknowledge the receipt of your letter/application ~~dated~~

RECEIVED 1/26/2009, and to inform you that the initial processing which includes an administrative review has been performed.

☑ AMEND. 45-09358-02
There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

☐ Please provide to this office within 30 days of your receipt of this card

_____.

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 143211.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.

NRC FORM 532 (RI)
(6-96)

Sincerely,
Licensing Assistance Team Leader